

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,791	03/10/2004	Thomas Duerbaum	DE 010138A	4510
24737	7590 03/15/2005		EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			PATEL, RAJNIKANT B	
	P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			PAPER NUMBER
ŕ			2838	
			DATE MAILED: 03/15/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/797,791	DUERBAUM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Rajnikant B. Patel	2838				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
<ul> <li>1) Responsive to communication(s) filed on <u>09 February 2005</u>.</li> <li>2a) This action is FINAL.</li> <li>2b) This action is non-final.</li> <li>3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</li> </ul>						
Disposition of Claims						
<ul> <li>4)  Claim(s) 5,8,9,11-13,15-18 and 21-26 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 5,8-9,11-13,15-18 and 21-26 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa					

Art Unit: 2838

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claim 9,16, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Schlecht (U.S. Patent # 6,222,742).

Schlecht discloses claimed invention a resonant converter (figure 2-3 and 5), including a multiple output (figure 2, item D1 and D2), a primary winding (figure T1 PRI) and at least two secondary winding (figure 2, item T1 SEC and T1 TER) and different output ratio (column 12, line 60-70 and column 13, line 1-5). Further for different winding direction (figure 2, secondary side dot representation).

### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2838

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 3

4. Claim 5,11-13,17-18 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent # 4,651,267) in combination with Jones (U.S. Patent # 4,533,986) and further in combination with Suzuji et al. (U.S. Patent # Suzuji et al. (4,980,811).

Nguyen discloses claimed invention a resonant converter (figure 4), including a transformer (figure 4, item 20), a primary winding (figure 4, item 20a), at least two secondary (figure 4, item 20b and 20c), at least one inductor series with capacitor and primary winding (figure 4, item L and C), multiple outputs (figure 4, item ID1 and ID2). However Nguyen et al. does not disclose the utilization of the technique for the resonant frequency determination of the resonant converter and at least two of the secondary winding being electrically connected one another. Jones teaches the utilization of the similar technique for the resonant frequency determination of the resonant converter (column 7, line 45-70 and column 8, line 1-40) and Suzuji et al. teaches the utilization of the similar technique for and at least two of the secondary winding being electrically connected one another (figure 10, item 124,125 and column 6, line 5-65). It would have been obvious one having an ordinary skill in the art at the time the invention made to modify Nguyen et al.'s inverter circuit by utilizing the technique taught by Jones and Suzuji et al. for the purpose of increasing efficiency of the inverter.

Page 4

Art Unit: 2838

5. Claim 8,15 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent # 4,651,267) in combination with Lopez et al. (U.S. Patent # 5,654,879) and further in combination with Suzuji et al. (U.S. Patent # Suzuji et al. (4,980,811).

Nguyen et al. disclose the claimed invention as explained in the claim 5, above except the utilization of the technique for output filter at each output and at least two of the secondary winding being electrically connected one another. Lopez et al. teaches the utilization of similar technique for output filter (figure 1) and Suzuji et al. teaches similar technique for and at least two of the secondary winding being electrically connected one another. It would have been obvious one having an ordinary skill in the art at the time the invention was made to modify Nguyen et al.'s inverter circuit by utilizing the technique taught by Lopez et al. and Suzuji et al. for the purpose of improving output result.

## **Double Patenting**

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 2838

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 5,8-9,11-13,15-18 and 21-26 are rejected under the judicially created doctrine of double patenting over claims 1-19 of U. S. Patent No. 6,721,191 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Both the sets of claims directed toward a resonant converter comprising: multiple converter outputs, including a transformer having a primary winding and at least two secondary windings wherein the resonant frequency of the resonant converter determined by the main inductance and a leakage inductance of the transformer and by a capacitive element.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 305-7042. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 703-308-1680. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2838

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rajnikant B Patel Primary Examiner Art Unit 2838